Serial No. 10/066,320 Applicant(s): Stamler *et al*.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-29 (Cancelled)
- 30. (Currently Amended) The method of claim 4, A method for producing a composition comprising S-nitrosohemoglobin, said method comprising adding free NO to a composition comprising oxyhemoglobin under conditions sufficient to maintain the R structure of hemoglobin and preserve redox chemistry in hemoglobin, wherein the free NO is added in an amount sufficient to produce S-nitrosohemoglobin and wherein the conditions sufficient to maintain the R structure of hemoglobin comprise a phosphate concentration that is less than 100 mM.
- 31. (Previously Presented) The method of claim 30, wherein the phosphate concentration is about 10 mM.
- (Currently Amended) The method of claim 4 <u>30</u>, wherein the amount of free NO is about 100 nM to about 1 mM and the ratio of free NO to heme is about 1:4000 to about 1:100.
- 33. (Currently Amended) The method of claim 5, A method of producing a composition comprising intracrythrocytic S-nitrosohemoglobin, said method comprising adding free NO to a composition comprising oxygenated crythrocytes under conditions sufficient to maintain the R structure of hemoglobin and preserve redox chemistry in hemoglobin, wherein the free NO is added in an amount sufficient to produce S-nitrosohemoglobin and wherein the conditions sufficient to maintain the R structure of hemoglobin comprise a phosphate concentration that is less than 100 mM.
- 34. (Previously Presented) The method of claim 33, wherein the phosphate concentration is about 10 mM.

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(Currently Amended) The method of claim 5 33, wherein the amount of free NO is about 100 nM to about 1 mM and the ratio of free NO to heme is about 1:4000 to about 1:100.